Foundations of Geometry Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Segment and Angle Bisectors Worksheet B PD\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For 1-6, Line l bisects Line AC at B.

1. Find the length BC and AC 2. Find the Length of AB and BC if AC is 24

A

B

C

l

?

?

A

B

C

l

7

?

3. Find the length of AC 4. Find AB, BC and AC

A

B

C

l

2x+1

X+10

A

B

C

l

12

5.Find AB, BC and AC 6. Find AB, BC and AC if AC=9x-2

A

B

C

l

5x-3

A

B

C

l

3x+5

4x-2

**For Numers 7-11, Ray CD Bisects <ACB**

7.Find m<ACD and m<DCB if m<ACB is 120 8. Find m<ACB and m<DCB if m<ACD is 35

A

D

B

C

A

D

B

C

9. Find m<ACD, m<DCB and m<ACB 10. Find m<ACD, m<DCB and m<ACB

A

D

B

C

(7X-2)

(8x-8)

A

D

B

C

(X+2)

(2X-38)

11. Find m<ACD, m<DCB and m<ACB , If m<ACB= 6x +6

A

D

B

C

(2x+23)

**Find the midpoint of the following Points**

12. A (3,7) B (5,9) 13. C (-5,4) D(5, 12) 14. (-1, -9), (-7, 3)